

Completed Pollution Prevention Project Case Study

United States Department of Energy
Office of Environmental Management
Fact Sheet

Reduced, Recycled, and Reused at MDA-P Los Alamos National Laboratory

Original Problem

The material disposal area at TA-16 (MDA-P) was used to bury construction debris and equipment that was potentially contaminated with trace high explosives. Material was sent to MDA-P from the late 1950s through 1984. Plans to cap the landfill were disapproved by the New Mexico Environmental Department (NMED).

The Project Solution

A Clean-Closure plan was approved by NMED in 1997, meaning that the material would be removed from the landfill and the site would be remediated. A remote-controlled robotic excavator was used to remove debris including scrap metal, concrete, and rocks. Water was used to decontaminate this material, and over 130,000 gallons of this water was reused for dust suppression on site. The scrap metal was sent to a metal recycler, some of the rock was used on site to prevent erosion, and most of the rock and concrete pieces were given to TA-54 to reuse as fill material.

Value of Improvement

Recycling about 2000 cubic yards of scrap metal saved approximately \$90,000. The total savings for reusing over 5000 cubic yards of rock and concrete was over \$250,000.

Lifecycle Waste Reduction	
Lifecycle Waste Reduction	>7000 cu. yds.
Commencement Date	1997
Project Useful Life (Years)	Indefinite



DOE Monetary Benefits

Total Project Cost	NA
Lifecycle Savings	>\$340,000
Return on Investment	NA

Benefits At-A-Glance

- Over 2000 cubic yards of scrap metal were recycled, saving over \$90,000.
- Over 5000 cubic yards of rocks and concrete pieces were reused, saving over \$250,000.
- Approximately 130,000 gallons of water, over 50% of the total used for the project, were reused at the site for dust suppression.

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	Summary Data
Priority Area:	Waste Minimization Projects
Project Type:	Recycling and Reuse
Total Project Cost:	NA
Lifecycle Savings:	>\$340,000
Implementing Group:	EES-15 / ESH-19
Benefiting Group:	FWO-SWO / ESA-WMM
Useful Life Years:	The project was completed in 2000, but the benefits of a remediated site and a free supply of fill material for TA-54 are much longer lasting.
Return on Investment:	NA
Lifecycle Waste Reduction:	>7000 cubic yards of scrap metal, rocks, and concrete were recycled or reused. ~130,000 gallons of water were reapplied at the site.
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